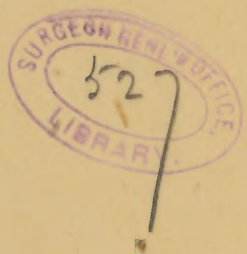
LEWIS (BERTHA)

Case of Supra-Spinous dislocation of the right shoulder + + + + + +



LEWIS (B)

[Reprinted from THE MEDICAL NEWS, February 16, 1895.]

CASE OF SUPRA-SPINOUS DISLOCATION OF THE RIGHT SHOULDER, PRESUMABLY OCCURRING AT BIRTH.

BY BERTHA LEWIS, M.D.,
INSTRUCTOR IN ORTHOPEDIC DEPARTMENT OF THE PHILADELPHIA POLYCLINIC AND COLLEGE FOR GRADUATES IN MEDICINE; CLINICIAN IN CHARGE OF ORTHOPEDIC DEPARTMENT OF THE WOMAN'S HOSPITAL.

IN August, 1894, Joseph S., eleven months old, was brought to the Neurological Department of the Philadelphia Polyclinic, as the mother had been told her baby's right arm was paralyzed. A critical examination by Dr. J. W. McConnell and myself revealed the fact that there was no loss of power in any of the muscles of hand or forearm, but that there was fixation at the shoulder. The case was at once referred to the orthopedic department of the same hospital, when I again saw the case in conjunction with Dr. J. Torrance Rugh. The mother gave the following history:

The child was born September 23, 1893, the labor being long and difficult; the forceps was used to deliver the head of the child; delivery of the shoulders was delayed and difficult, force being again required, but the history is not clear whether the fingers or a hook was applied. When the child was born it was too badly bruised to admit of handling, and had to be rolled in cotton. On the second day the nurse called the doctor's attention to the limp condition of the right arm, but no attention was given to it, the mother says, further than to assure the family that "the arm would

be all right in a short time, that it was a little injured from pressure."

Nothing was done until the end of the third week, at which time the family physician returned to the city, and the mother called his attention to the arm. He examined it and applied a bandage, placing the arm approximately in the Velpeau position. This treatment was continued for two months, at the end of which time the condition of the arm was not improved. The mother's anxiety was not allayed by the assurance that the arm would come right in time if she did nothing, and that only a nerve had been injured. The mistrust in this wise (?) counsel brought her to the neurological department as already stated.

Examination in the orthopedic department showed fixation at the right shoulder, the head of the humerus protruding above the spine of the scapula posterior to the acromion process and being firmly fixed in this position. The head and neck of the humerus could be clearly outlined, the muscles being very flaccid from lack of use. The marked anterior rotation of the humerus in its long axis produced an exaggerated pronation of the forearm and hand.

The child was put under ether for a more complete diagnosis and the reduction of the deformity, because of the limited motion and the long duration of the deformity. Firm fibrous ankylosis was anticipated, but when complete relaxation was obtained, and the scapula fixed, extension applied to the arm caused the head of the humerus to slip easily into the glenoid cavity. No adhesions had formed; rotation, adduction, abduction, all movements were free. Then came the problem of maintaining the correction, as we had to deal with abnormally contracted muscles and ligaments posteriorly, and the reverse or greatly relaxed muscles and ligaments anteriorly.

The unique method was suggested by Dr. Rugh, of

applying a plaster-of-Paris bandage with the arm in position in which the deformity had been reduced—namely, that of extension laterally, the arm and forearm on a plane with the trunk and on a level with the shoulder. This was done; pressure was made in the plaster-of-Paris, while soft, at a point posterior to the acromion and below the spine of the scapula. The plaster-of-Paris bandage was carried to the wrist. This dressing was removed on the eighth day, when it was found that the head of the humerus had slipped a little posteriorly. The arm was then slightly over-extended posteriorly to the plane of the trunk, and a second plaster-of-Paris bandage was applied. In this, as in the first application, the bandage was carried around the trunk, over the shoulder, and down to the lower angle of the scapula, over the right arm to the wrist. The child was restless for the first two nights, but was quiet and comfortable afterward.

This treatment was continued for eight weeks, when the bandage was finally removed, and the arm maintained nearly a normal position. Owing to the long period of inactivity, for the part had never had any normal period, there is slight stiffness at the shoulder. Supination is difficult, and pronation is greatly exaggerated. Movements, with massage and electricity, have been used in the subsequent treatment. Passive movements in all normal directions, and massage of the muscles of the upper arm and shoulder, have been practised on each visit of the child to our clinic, and the mother has been instructed to practise massage daily.

This has been a very unusual as well as an interesting and instructive case. I have been unable to find any report of a case of supra-spinous dislocation occurring at birth. Most authorities claim that the supposed cases of dislocation have been fractures or separations of the epiphyses from the shaft of the humerus, but we are certain that we had a case of supra-spinous

dislocation of the right humerus, as the head of the bone was distinctly outlined above the spine of the scapula, and had it been a fracture or an epiphyseal separation, reduction could not have been accomplished so easily and completely.

3234 Powelton Ave.